



2)

Correlation in Low Latitudes

The power ratio in the 30-60 day range between 215 hPa O₃ and 215 hPa H₂O VMR time series. The significance level was estimated locally from a 1st-order autoregressive model. Values greater than 2.1 are deemed statistically significant (i.e., 5% significance level).

The O₃ and H₂O time series in a 30-60 day bandpass are correlated with correlation amplitude. The O₃ and H₂O time series covering the period 1979-1999 are shown in **Figure 3**. Regions where correlation is statistically significant at the 5% level are shaded gray. All statistically significant correlation occurs mostly over ocean, suggesting a mechanism involving lofting of air mass from convective regions. The observed negative correlation.

A cross-correlation map between the 30-60 day bandpass filtered time series is shown in **Figure 4**. The significance of cross-correlation, a Monte Carlo simulation, and other confidence levels. Simulated time series are modeled as first-order autoregressive.